

THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

RAWLINS *et al.*

Appl. No.: 10/719,058

Filed: November 24, 2003

For: **Methods, Systems, and Computer  
Program Products for Parallel  
Correlation and Applications  
Thereof**

Confirmation No.: 9124

Art Unit: 2193

Examiner: Ngo, Chuong D.

Atty. Docket: 1744.1380000

**Sixth Supplemental Information Disclosure Statement**

***Mail Stop Amendment***

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98. The numbering on this Sixth Supplemental Information Disclosure Statement is a continuation of the numbering in Applicants' Fifth Supplemental Information Disclosure Statement filed on August 17, 2006 in connection with the above-captioned application.

Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may

not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

Applicants provide the following comments regarding the documents:

Document AL26 was cited in an Office Action in related U.S. Patent Application No. 10/305,299, filed November 27, 2002, entitled "Method and Apparatus for Improving Dynamic Range in a Communication System," directed to related subject matter. Also cited in said Office Action were U.S. Patent Nos. 4,380,828; 4,562,414; and 5,339,459, which have already been cited in the present application.

Documents AO62, AG79-AI79, and AA80 were identified in a search relating to U.S. Patent Application No. 11/582,367, filed October 18, 2006, entitled "Apparatus and Method for Communicating an Input Signal in Polar Representation," directed to related subject matter.

Documents AA78-AI78 were cited in an Office Action in related U.S. Patent Application No. 10/318,207, filed December 13, 2002, entitled "Method and Apparatus for Reducing Re-Radiation Using Techniques of Universal Frequency Translation Technology," directed to related subject matter.

Document AA79 was cited in an Office Action in related U.S. Patent Application No. 09/476,092, filed January 3, 2000, entitled "Analog Zero IF FM Decoder and Embodiments Thereof, Such as the Family Radio Service," directed to related subject matter.

Document AB79 was cited in an Office Action in related U.S. Patent Application No. 11/173,021, filed July 5, 2005, entitled "Method and Circuit for Down-Converting a

Signal," directed to related subject matter. Also cited in said Office Action were U.S. Patent Nos. 3,694,754 and 6,393,070, which have already been cited in the present application.

Documents AC79-AE79 are co-owned patents which are directed to related subject matter.

Document AF79 was cited in an International Search Report and Written Opinion in related PCT Application No. PCT/US2004/013813, filed April 30, 2004, entitled "Real-Time Wireless Exchange of Objects," directed to related subject matter.

Document AB80 was cited in an Office Action in related U.S. Patent Application No. 09/569,045, filed May 10, 2000, entitled "Methods and Apparatuses Relating to a Universal Platform Module and Enabled by Universal Frequency Translation Technology," directed to related subject matter. Also cited in said Office Action were U.S. Patent Nos. 5,844,868 and 5,982,315, which have already been cited in the present application.

Document AC80 was cited in an Office Action in related U.S. Patent Application No. 10/453,622, filed June 4, 2003, entitled "Active Polyphase Inverter Filter for Quadrature Signal Generation," directed to related subject matter. Also cited in said Office Action was Salous, S., "IF digital generation of FMCW waveforms for wideband channel characterization," IEE Proceedings-I, IEE, Vol. 139, No. 3, pp. 281-288 (June 1992), which has already been cited in the present application.

Document AD80 was cited in an Office Action in related U.S. Patent Application No. 10/086,367, filed March 4, 2002, entitled "Method and System for Frequency Up-

Conversion," directed to related subject matter. Also cited in said Office Action was U.S. Patent No. 3,641,442, which has already been cited in the present application.

This statement should not be construed as a representation that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

Applicants have checked the appropriate boxes below:

- ☐ 1. Statement under 37 C.F.R. 1.704(d). Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this information disclosure statement.
- ☒ 2. Filing under 37 C.F.R. § 1.97(b). This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits. No statement or fee is required.
- ☐ 3. Filing under 37 C.F.R. § 1.97(c). This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection, or Notice of Allowance, or an action that otherwise closes prosecution in the application.
  - ☐ a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a

counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).

☐ b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).

☐ c. Attached is our PTO-2038 Credit Card Payment Form in the amount of \_\_\_\_\_ in payment of the fee under 37 C.F.R. § 1.17(p).

☐ 4. Filing under 37 C.F.R. § 1.97(d) This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee. Enclosed find our PTO-2038 Credit Card Payment Form in the amount of \$ \_\_\_\_\_ in payment of the fee under 37 C.F.R. § 1.17(p); in addition:

☐ a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).

- ☐ b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).
- ☐ 5. The document(s) was/were cited in a search report by a foreign patent office in a counterpart foreign application. Submission of an English language version of the search report that indicates the degree of relevance found by the foreign office is provided in satisfaction of the requirement for a concise explanation of relevance. 1138 OG 37, 38.
- ☒ 6. A concise explanation of the relevance of the non-English language documents appears below in accordance with 37 C.F.R. § 1.98(a)(3):
- Document AL26 (JP 10-173563) appears to describe an up-down tuner. An English language translation of document AL26 is enclosed as document AN62.
- ☒ 7. Copies of documents AL26, AN62, and AO62 are enclosed. However, in accordance with 37 C.F.R. § 1.98(a)(2), copies of the U.S. patents and patent publications cited on the attached Form PTO-1449 are not enclosed.
- ☐ 8. Copies of the documents were cited by or submitted to the Office in an IDS that complies with 37 C.F.R. § 1.98(a)-(c) in Application No. \_\_\_\_\_, filed

\_\_\_\_\_, which is relied upon for an earlier filing date under 35 U.S.C. § 120.

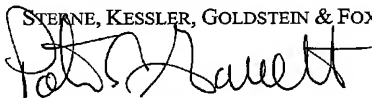
Thus, copies of these documents are not attached. 37 C.F.R. § 1.98(d).

- ☒ 9. It is expected that the examiner will review the prosecution and cited art in the parent application no. 09/987,193, filed November 13, 2001 (now U.S. Patent No. 7,010,559), in accordance with MPEP 2001.06(b), and indicate in the next communication from the office that the art cited in the earlier prosecution history has been reviewed in connection with the present application.

It is respectfully requested that the Examiner initial and return a copy of the enclosed Form PTO-1449, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.  
  
Patrick E. Garrett  
Attorney for Applicants  
Registration No. 39,987

Date: November 8, 2006

1100 New York Avenue, N.W.  
Washington, D.C. 20005-3934  
(202) 371-2600

605690\_1.DOC

FORM PTO-1449

**SIXTH SUPPLEMENTAL  
INFORMATION DISCLOSURE STATEMENT**

ATTY. DOCKET NO.  
1744.1380000APPLICATION NO.  
10/719,058FIRST NAMED INVENTOR  
Gregory S. RAWLINSFILING DATE  
November 24, 2003ART UNIT  
2193**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA78	3,739,282	06/1973	Bruch <i>et al.</i>			
	AB78	4,439,787	03/1984	Mogl <i>et al.</i>			
	AC78	4,866,441	09/1989	Conway <i>et al.</i>			
	AD78	4,885,671	12/1989	Peil			
	AE78	5,164,985	11/1992	Nysen <i>et al.</i>			
	AF78	5,734,683	03/1998	Hulkko <i>et al.</i>			
	AG78	5,918,167	06/1999	Tiller <i>et al.</i>			
	AH78	6,445,726 B1	09/2002	Gharpurey			
	AI78	6,560,451 B1	05/2003	Somayajula			

**FOREIGN PATENT DOCUMENTS**

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL26	JP 10-173563	06/1998	JP			Yes (Doc. AN62)
	AM						Yes No

**NON-PATENT LITERATURE DOCUMENTS**

EXAMINER INITIAL	DOC. REF.	CITATION
	AN62	English-language Computer Translation of Japanese Patent Publication No. JP 10-173563, provided by the JPO, 10 pages (June 26, 1998 - Date of publication of application) and cited In U.S. Patent Application Ser. No. 10/305,299, directed to related subject matter.
	AO62	<i>What is I/Q Data?</i> , printed September 16, 2006, from <a href="http://zone.nl.com">http://zone.nl.com</a> , 8 pages (Copyright 2003).
	AP	
	AQ	
	AR	

EXAMINER

DATE CONSIDERED

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449

ATTY. DOCKET NO.  
1744.1380000APPLICATION NO.  
10/719,058SIXTH SUPPLEMENTAL  
INFORMATION DISCLOSURE STATEMENTFIRST NAMED INVENTOR  
Gregory S. RAWLINSFILING DATE  
November 24, 2003ART UNIT  
2193

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA79	4,143,322	03/1979	Shimamura			
	AB79	2,530,824	11/1950	King			
	AC79	7,107,028 B2	09/2006	Sorrells <i>et al.</i>			
	AD79	7,110,435 B1	09/2006	Sorrells <i>et al.</i>			
	AE79	7,110,444 B1	09/2006	Sorrells <i>et al.</i>			
	AF79	6,973,476 B1	12/2005	Naden <i>et al.</i>			
	AG79	5,834,987	11/1998	Dent			
	AH79	RE37,138 E	04/2001	Dent			
	AI79	6,441,694 B1	08/2002	Turcotte <i>et al.</i>			

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

## NON-PATENT LITERATURE DOCUMENTS

EXAMINER INITIAL	DOC. REF.	CITATION
	AN	
	AO	
	AP	
	AQ	
	AR	

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449

SIXTH SUPPLEMENTAL  
INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1744.1380000APPLICATION NO.  
10/719,058FIRST NAMED INVENTOR  
Gregory S. RAWLINSFILING DATE  
November 24, 2003ART UNIT  
2193**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA80	6,892,057 B2	05/2005	Nilsson			
	AB80	6,741,650 B1	05/2004	Painchaud <i>et al.</i>			
	AC80	6,441,659 B1	08/2002	Demone			
	AD80	2002/0132642 A1	09/2002	Hines <i>et al.</i>			
	AE						
	AF						
	AG						
	AH						
	AI						

**FOREIGN PATENT DOCUMENTS**

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

**NON-PATENT LITERATURE DOCUMENTS**

EXAMINER INITIAL	DOC. REF.	CITATION
	AN	
	AO	
	AP	
	AQ	
	AR	

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.